

Notice of Allowability

Application No.

09/923,464

Examiner

Brian R. Gordon

Applicant(s)

PECK ET AL.

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8-16-04.
2. ☒ The allowed claim(s) is/are 13-25.
3. ☒ The drawings filed on 1-15-02 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Rocky Tsao on November 12, 2004.

The application has been amended as follows:

Amend the claims as follows:

13. A method of conducting parallel chemical synthesis comprising:

determining an optimal ejection velocity for dispensing a plurality of fluids through a supply assembly into reaction wells of a synthesis apparatus by measuring a set of coefficients of variation and a set of synthesis support spattering heights for each of the fluids as a function of ejection pressure to derive an optimal ejection pressure at which both reagent accumulation and synthesis support spattering height are minimized for dispensing the fluids, wherein a the maximal optimal ejection pressure applicable for of all of the fluids defining defines the optimal ejection velocity for dispensing each individual fluids, dispensing the fluids via the supply assembly at the determined optimal ejection velocity into the reaction wells of a synthesis apparatus, and reacting the fluids within the reaction wells.

14. Amend the claim by deleting the phrase "the pumping assembly" (in next to last line) and inserting -a pumping assembly-

Amend lines 1 and 2 of claim 15 as follows:

15. The method of claim 14, ~~further comprising dispensing a plurality of reactants via the supply assembly into a plurality of wells of a parallel synthesis plate, wherein the~~ dispensed fluids are reactants, said synthesis apparatus is a parallel synthesis plate, and each of the wells is defined by a bore extending from a first end to a second end of each well, includes the synthesis reaction medium disposed within the well between the first and second ends, and has an opening at the first end having an inner diameter of about 3.5 mm or less, an inner diameter at the synthesis reaction medium closest to the second end of about 3.0 mm or less, and each of the wells are arranged in a z-

Art Unit: 1743

dimensional array such that the wells are spaced apart from neighboring wells center-to-center by about 4.5 mm or less; and the supply assembly includes at least one valve for dispensing fluids through a nozzle, the valve and nozzle together configured to provide fluids to wells in volumes as small as about 2 microliters.

19. The method of claim 17, further comprising draining each of the wells via a pumping assembly, wherein the pumping assembly is in communication at the second end of the wells for applying a vacuum thereto, and the membrane has a bubble point pressure higher than the applied vacuum, the bubble point pressure being a differential gas pressure at which the first steady stream of gas bubbles are emitted from the membrane when immersed in a liquid.

Cancel withdrawn claims 1-12 and 26.

Allowable Subject Matter

2. Claims 13-25 are allowed.
3. The following is an examiner's statement of reasons for allowance: The prior art of record does not teach nor fairly suggest a method of conducting parallel chemical synthesis comprising: determining an optimal ejection velocity for dispensing a plurality of fluids through a supply assembly into reaction wells of a synthesis apparatus by measuring a set of coefficients of variation and a set of synthesis support spattering heights for each of the fluids as a function of ejection pressure to derive an optimal ejection pressure at which both reagent accumulation and synthesis support spattering height are minimized for dispensing the fluids, wherein a maximal optimal ejection pressure applicable for all of the fluids defines the optimal ejection velocity for dispensing each individual fluid, and dispensing the fluids via the supply assembly at the determined optimal ejection velocity into the reaction wells of a synthesis apparatus.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg


Jill Warden
Supervisory Patent Examiner
Technology Center 1700